

RESPONSE UNDER 37 C.F.R. § 1.116

EXPEDITED PROCEDURE – Art Unit 3723

Attorney Docket No. 108298539US2

Disclosure No. 00-0448.02/US

Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1-6. (Canceled)

7. (Previously presented) A planarizing machine, comprising:
a table having a support surface;
a processing pad on the support surface;
a carrier assembly having a head configured to hold a microelectronic workpiece and a drive assembly carrying the head relative to the support surface; and
a solution dispenser separate from the head, the solution dispenser being configured to discharge a planarizing solution onto a plurality of locations on the pad, wherein the solution dispenser comprises: an elongated support extending over the pad at a location spaced apart from a travel path of the head; a fluid passageway carried by the support through which a planarizing solution can flow; and a fluid discharge unit slidably carried by the support and in fluid communication with the fluid passageway, the fluid discharge unit being moveable along the support to discharge a flow of the planarizing solution onto separate areas of the processing pad during a planarizing cycle.
8. (Previously presented) A planarizing machine, comprising:
a table having a support surface;
a processing pad on the support surface;
a carrier assembly having a head configured to hold a microelectronic workpiece and a drive assembly carrying the head relative to the support surface; and
a solution dispenser separate from the head, the solution dispenser being configured to discharge a planarizing solution onto a plurality of locations on the pad, wherein the solution dispenser comprises a support extending over the pad at a location spaced apart from a travel path of the head, a fluid passageway carried by the

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support through which a planarizing solution can flow, and a nozzle carried by the support and in fluid communication with the fluid passageway, the nozzle being rotatably coupled to the support to be movable between a first position to discharge the planarizing solution at a first angle relative to a surface of the pad and a second position to discharge the planarizing solution at a second angle relative to the surface of the pad, the second angle being different from the first angle.

9-17. (Canceled)

18. (Previously presented) A planarizing machine, comprising:
a table having a support surface;
a processing pad on the support surface;
a carrier assembly having a head configured to hold a microelectronic workpiece and a drive assembly carrying the head; and
a solution dispenser separate from the head, the solution dispenser having a support extending over the pad and a distributor carried by the support, the distributor being configured to discharge a planarizing solution from a plurality of locations along the support, wherein the support comprises an elongated arm and a fluid passageway carried by the arm through which a planarizing solution can flow, and the distributor further comprises a fluid discharge unit slidably carried by the arm and in fluid communication with the fluid passageway, the fluid discharge unit being moveable along the arm to discharge a flow of the planarizing solution along different areas of the processing pad during a planarizing cycle.

19. (Previously presented) A planarizing machine, comprising:

a table having a support surface;
a processing pad on the support surface;

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a carrier assembly having a head configured to hold a microelectronic workpiece and a drive assembly carrying the head; and
a solution dispenser separate from the head, the solution dispenser having a support extending over the pad and a distributor carried by the support, the distributor being configured to discharge a planarizing solution from a plurality of locations along the support, wherein the support comprises an elongated arm and a fluid passageway carried by the arm through which a planarizing solution can flow, and the distributor further comprises a nozzle carried by the arm and in fluid communication with the fluid passageway, the nozzle being rotatably coupled to the arm to be movable between a first position to discharge the planarizing solution at a first angle relative to a surface of the pad and a second position to discharge the planarizing solution at a second angle relative to the surface of the pad, the second angle being different from the first angle.

20. (Previously presented) A planarizing machine, comprising:
a table having a support surface;
a processing pad on the support surface;
a carrier assembly having a head configured to hold a microelectronic workpiece and a drive assembly carrying the head; and
a solution dispenser having support above the pad and a nozzle moveably coupled to the support so that the nozzle is movable during a planarizing cycle, the nozzle being coupleable to a planarizing solution.

21. (Original) The planarizing machine of claim 20 wherein:
the support comprises an elongated arm and a fluid passageway carried by the arm through which a planarizing solution can flow; and
the nozzle is slidably carried by the arm and in fluid communication with the fluid passageway.

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22. (Currently amended) The planarizing machine, comprising of claim 20 wherein:
a table having a support surface;
a processing pad on the support surface;
a carrier assembly having a head configured to hold a microelectronic workpiece and a
drive assembly carrying the head; and
a solution dispenser having support above the pad and a nozzle moveably coupled to the
support so that the nozzle is movable during a planarizing cycle, the nozzle being
coupleable to a planarizing solution, wherein:

the support comprises an elongated arm and a fluid passageway carried by the arm
through which a planarizing solution can flow; and
the nozzle is rotatably coupled to the arm to be movable between a first position to
discharge the planarizing solution at a first angle relative to a surface of the pad
and a second position to discharge the planarizing solution at a second angle
relative to the surface of the pad, the second angle being different from the first
angle.

- 23-51. (Canceled)

52. (Previously presented) A method of processing a microelectronic workpiece,
comprising:

removing material from the workpiece by pressing the workpiece against a contact
surface of a processing pad and imparting relative motion between the workpiece
and the contact surface; and
discharging a planarizing solution directly onto a first region of the contact surface and
concurrently discharging the planarizing solution directly onto a second region of
the contact surface separate from the first region, the planarizing solution being
deposited onto the first and second regions separate from a head carrying the
workpiece, wherein discharging the planarizing solution comprises (a) passing the
planarizing solution through a fluid discharge unit that is moveably carried by a

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support over the processing pad and (b) concurrently moving the fluid discharge unit relative to the support to discharge the planarizing fluid at different regions across the contact surface while removing material from the workpiece, and wherein the fluid discharge unit includes a nozzle.

53. (Original) The method of claim 52 wherein moving the fluid discharge unit comprises sliding the fluid discharge unit along the support.

54. (Currently amended) The-A method of processing a microelectronic workpiece, comprising: claim 52

removing material from the workpiece by pressing the workpiece against a contact surface of a processing pad and imparting relative motion between the workpiece and the contact surface; and

discharging a planarizing solution directly onto a first region of the contact surface and concurrently discharging the planarizing solution directly onto a second region of the contact surface separate from the first region, the planarizing solution being deposited onto the first and second regions separate from a head carrying the workpiece, wherein discharging the planarizing solution comprises (a) passing the planarizing solution through a fluid discharge unit that is moveably carried by a support over the processing pad and (b) concurrently moving the fluid discharge unit relative to the support to discharge the planarizing fluid at different regions across the contact surface while removing material from the workpiece, and wherein the fluid discharge unit includes a nozzle, and further wherein moving the fluid discharge unit comprises rotating the fluid discharge unit about a pivot point on the support, the fluid discharge unit being pivotally movable between a first position to discharge the planarizing solution at a first angle relative to a surface of the pad and a second position to discharge the planarizing solution at a second angle relative to the surface of the pad, the second angle being different from the first angle.

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55. (Canceled)

56. (Previously presented) The planarizing machine of claim 7, further comprising an actuator coupled to the fluid discharge unit and configured to move the fluid discharge unit along the support.

57. (Previously presented) The planarizing machine of claim 8, further comprising an actuator coupled to the nozzle and configured to rotate the nozzle relative to the support.

58. (Previously presented) The planarizing machine of claim 18, further comprising an actuator coupled to the fluid discharge unit and configured to move the fluid discharge unit along the arm.

59. (Previously presented) The planarizing machine of claim 19, further comprising an actuator coupled to the nozzle and configured to rotate the nozzle relative to the arm.

60. (Previously presented) The planarizing machine of claim 20, further comprising an actuator coupled to the nozzle and configured to move the nozzle relative to the support.

61. (Previously presented) The planarizing machine of claim 52, further comprising an actuator coupled to the fluid discharge unit and configured to move the fluid discharge unit relative to the support.